Claims

1. Method for performing a flexible multicast of multicast data to a multicast group within a telecommunication system wherein the multicast data is provided by a broadcast/multicast server and transferred by means of channels to the users registered to the multicast group

characterised in that

multi-channel multicast groups (B1,B2,...) are provided, wherein each multi-channel multicast group is configured and uniquely identified by means of a first identifier, and each multi-channel multicast group offers at least one channel wherein a channel is uniquely identified by means of a second identifier,
and an announcement multicast group (A) is provided for informing about availability and configuration of the multi-channel multicast groups
wherein
the announcement multicast group (A) is announced to the user and the user joins the announcement multicast group and,
the first identifier is used to join the user to the multi channel multicast group and,
the second identifier is used for zapping between the channels.

2. Method according to claim 1 characterised in that a hopping between the multi channel multicast groups is performed by means of join-and-leave transactions to and from a multi channel multicast group.

3. Method according to claim 1 or 2 characterised in that the configuration of the multi channel multicast group is performed by means of parameters defining different transmission quality, location dependent information, coding method, prise, protection key, reliability, expected jitter or restricted to certain subscriptions.

4. Method according to claim 1, 2 or 3 characterised in that joining and leaving to and from the multi channel multicast group is user-driven and the user takes the decision to hop between the multi channel multicast groups.

5. Method according to claim 1, 2 or 3 characterised in that joining and leaving to and from the multi channel multicast group is server driven with a mechanism controlled by the server.

6. Method according to claim 1 characterised in that the first identifier is a multicast address of a multi channel multicast group.

7. Method according to claim 1 characterised in that the second identifier depends on used access network.

8. Method according to claim 7 characterised in that the second identifier is the access bearer or an identifier identifying the multicast data flow transported on one access bearer or a combination of both.

9. Method according to one of the claims 1 to 8 characterised in that some further parameters describing a channel are sent by means of the announcement multicast group (A) or are included in each multi-channel multicast group.

10. Method according to claim 1 characterised in that the announcement multicast group A is sent regularly, in certain intervals or continuously.

11. Method according to one of claims 1 to 10 characterised in that a list of multi-channels groups not yet established but for which users have already shown interest is multicasted to the users by means of the announcement multicast group A.

12. Method according to one of claims 1 or 11 characterised in that a new multi channel multicast group is established and announced to the users.

13. Method according to claim 10 or 12 characterised in that the new multi channel multicast group is established if a certain threshold level of users interest is reached,

14. Method according to one of claims 1 or 13 characterised in that the multi channel multicast group is dissolved when the last user leaves said group.

15. System adapted to perform a flexible multicast of multicast data to a multicast group within a telecommunication system wherein the multicast data is provided by a broadcast/multicast server and transferred by means of channels to the users having terminals registered to the multicast group

characterised in that

within the system

multi-channel multicast groups (B1,B2,...) are provided,
wherein each multi-channel multicast group is configured and uniquely identified by means of a first identifier,
and each multi-channel multicast group offers at least one channel wherein a channel is uniquely identified by means of a second identifier,
and an announcement multicast group (A) is provided for informing about availability and configuration of the multi-channel multicast groups
and wherein the system has
means for announcement of the announcement multicast group (A) to the users and,
means for joining the user to the announcement multicast group and,
means for joining the user to the multi channel multicast group using the first identifier and,
means for zapping the user between the channels using the second identifier.

16. System according to claim 15 characterised in that the system forces to user to change the group and/or to zap between the channels.

17. Receiver adapted to perform a flexible multicast of multicast data to a multicast group within a telecommunication system wherein the multicast data is provided by a broadcast/multicast server and transferred by means of channels to the users registered to the multicast group

characterised in that

multi-channel multicast groups (B1,B2,...) are provided,
wherein each multi-channel multicast group is configured and uniquely identified by means of a first identifier,
and each multi-channel multicast group offers at least one channel wherein a channel is uniquely identified by means of a second identifier,
and an announcement multicast group (A) is provided for informing about availability and configuration of the multi-channel multicast groups

and the receiver has

means for receiving the announcement multicast group (A) and,
means for joining the user to the announcement multicast group and,
means for joining the user to the multi channel multicast group using the first identifier and,
means for zapping between the channels using the second identifier.

18. Receiver according to claim 17 characterised in that receiver has means for tuning the receiving data wherein the second identifier is used to select the appropriate bearer on which the channel is being transmitted in order to switch between access bearers.

19. Receiver according to claim 17 or 18 characterised in that receiver has means for de-multiplexing the channels according to the second identifier, which identifies the multicast data flow transported on one access bearer.